Calibration and Standardization of Large Surveys and Missions in Astronomy and Astrophysics

Monday 16 April 2012 - Thursday 19 April 2012

Fermilab

Conference Themes

Topics of the conference are expected in the broad areas of Astrometry, Photometry, and Spectrophotometry across the electromagnetic spectrum, and how they impact the calibration and standardization of large surveys and missions in astronomy and astrophysics. The conference coverage includes not only the traditional ultraviolet, visible, and infrared regimes, but also the very high energy (x-ray and gamma ray) to the very long wavelength regime (radio and millimeter). Common issues to be discussed include definition of standard systems, maintenance of standard systems, intercalibration between systems, Earth's atmospheric effects, inventory of transformable systems and databases, regions of applicability of data transformations, calibration of instruments/telescopes before and after deployment, impact of calibration errors on astrophysics parameters, and archiving of calibration data.

Overview

Large Surveys and Missions (General)

Large Surveys and Missions (Gamma Ray)

Large Surveys and Missions (X-ray)

Large Surveys and Missions (UV/Optical/NIR)

Large Surveys and Missions (Mid- and Far-IR)

Large Surveys and Missions (Sub-mm and Radio)

Definition of standard systems

Maintenance of standard systems

Intercalibration between systems

Laboratory Techniques

Earth's atmospheric effects

Inventory of transformable systems and databases

Regions of applicability of data transformations

Calibration of instruments/telescopes before and after deployment

Impact of calibration errors on astrophysics parameters

Archiving of calibration data